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module pilot's biomedical harness exercise late yesterday, the data was technically and medically acceptable, according to Dr. Jerry Hordensky. The exercise developed a maximum heart rate on Slayton of approximately 120. A few premature atrial contractions were noted but these were very scattered and the data elicts no medical concern. We will return in 6 minutes for Santiago and ATS-6 satellite pass and in about 17 minutes, the start of the Inflight Press Conference. This is Apollo Control at 191:50.

SPEAKER All stations standby for an Apollo Control announcement in one minute.

PAO This is Apollo Control at 191:56 ground elapsed time, 50 seconds from acquisition through Santiago, Chile. And about 11 minutes to start of the Inflight Press Conference. Overlapping coverage here between Santiago and ATS-6 satellite. We'll stand by for spacecraft communicator, Bob Crippen's first call to the crew, which should be finishing their breakfast at this time.

ACDR Hello, Houston, Apollo from Santiago. How do you read?

CC-H Loud and clear, Tom. We're with you for about 5 minutes here.

ACDR Okay, you've got S-band down at Santiago? CC-H That's affirm. S-band only. No VHF.

ACDR Okay. Well, I think we've got this spacecraft all stowed and cleaned up in a hurry here. Looks like big roomy spacecraft compared what it's been looking like for the last 9 days.

CC-H Well, that's good to hear you guys got up and did a little housekeeping this morning. I assume that's why you wanted to get a little bit early. Before we get started in the press conference, I might - would like to go ahead and get that waste stowage vent valve closed and that way we'll avoid any CNWs from a high O2 flow while held - during the thing. We'll probably be asking you to open it up again after the conference because we haven't completed the purge.

CMP Okay.

ACDR Okay. Just going to keep that open and that's what you're going to call the purge in for awhile. Right?

CC-H That's affirm. We're - we're purging by just opening that vent up, that - - that allows us to purge through the CM reg. One item I might mention here, Tom. I think you guys said hello to the people in Quito the other day, we're now passing over Santiago of course and this is the first manned mission that these guys have supported and they're standing down there listening if you guys might want to say hello to them this morning.

ACDR Sure, glad to. Deke's up in the docking module. In fact he said visited, but we would like to say hello to all the good people in Chile and thank you so very much for all your support and help on the mission.

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CMP You have a beautiful country down there. Especially - we can see your Andes very well. Just white, very rugged, beautiful from this altitude.

DMP Good morning down there, guys, wish I was back there with you one of these days after seeing all the good work you've done for us. We've enjoyed the one time spent with you and hope to get back again some day.

ACDR I don't believe the beautiful view coming across the Pacific and see your country run into the Andes and on over. We've taken a whole lot of pictures and - of your country - and we hope that we can have some to show you, and maybe visit you someday.

DMP Give the mayor and the Fire Department my regards.

CC-H Sounds to me like you're trying to work up another trip there Deke and Tom.

ACDR Very (garble) old buddy.

CC-H Why not, why not. I'm sure those guys appreciate hearing from you, but it looks like you're just now coming across the - across the coast. Sounds like a beautiful view.

ACDR Yeah, it is.

ACDR We also hope that we've gotten a lot of pictures there for the people of Chile to help them on their resources and fishing.

CC-H Very good.

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CC-H Apollo, Houston. How do you read through the ATS?

ACDR Roger. Read you loud and clear through the ATS.

How us?

CC-H Okay. We - pretty good. We've got a little static in the background here. We'll try - try to clear it up and we dropped out there due to the anomaly change apparently. And we've got a good TV picture coming in here now. Let's take a look at it and why don't you if you can - I'd like to just get a short count out of each of you if you can when you get into position.

ACDR Roger. 1,2,3,4,5.

DMP 1,2,3,4,5. CMP 1,2,3,4,5.

CC-H Okay, all three of those came in - came in good.

And let us work on the TV picture here just a little bit.

CC-H Deke, you look awful pretty there upside down to us but it's disorienting everybody here on the ground. Could we talk you into turning over - is there - is there enough room for you get straight that way?

DMP Well, we'll try. I'm not sure. CC-H Going to give all of us vertigo.

CC-H You guys look all cleaned up and spiffy. Could - wouldn't believe you've been up there for 9 days.

ACDR Well, we're bright-eyed and bushy-tailed this morning, Crip, ready to go.

CC-H Very good.

ACDR Cleaned the house and everybody had a shave and what all.

CC-H Rog. Com - twinkle toes there.
CC-H Kind of hard to squeeze in there.

DMP I'm competing with the hatch cover here.

CC-H Understand.
DMP (Garble)

CC-H Got room for your feet?

CC-H Okay Vance, the - the only thing over in your corner there is - is the light kind of - there's not very much on your face. I don't know - looks like there - that's great right there if you can do that. That's beautiful. Well, if you - you guys about ready?

ACDR We're ready.

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CC-H Okay. You guys look like you're all set up and - and ready and I'm going to go ahead and turn it over to the gents in building 2. Over to the press.

DONNELLY Good morning - -

ACDR Sounds good. See you later, Crip.

DONNELLY -- Tom, Deke, and Vance. We're ready to begin now. Questions, please? Howard Benedict, AP.

QUERY First, congratulations to all of you on a super mission and my question is for Commander Stafford. When you splash down tomorrow it will mark the end of an era in the U. S. manned space program. You, Tom, have been a part of that program for many years. How do you personally feel? Do you have any regrets about the closing of this chapter in space exploration?

ACDR Well first, good morning, Howard. I think it's great of you guys to get up this early in the morning to say - to come up here and ask questions. Yeah, it's been a - to me, it's been a great number of years here, enjoyed every bit of it. Certainly there's a lot of nostalgia in seeing Apollo - the end of Apollo; however, I think we are opening a new area with respect to the Shuttle where space can have more utility, bring more benefits to man. It's going to be a quiet program for a couple of years, but down the road, I - things are going to be great too, except it's just going to be a couple of years without some manned space flights. Over.

DONNELLY Bruce Hicks, UPI.

HICKS Vance Brand. This was your first flight, but you've said very little about your personal feelings. Could you now describe those personal feelings of the mission?

cmp Well it's, in a nut shell, the greatest experience I ever had. It's just been super. Things up here are - are really thrilling. It started with the launch. I'll never forget that. And seeing the earth from up here at this altitude, just a fantastic thing. The experiences of zero g and, of course, the prime things in the mission have all been a lot of fun and - but that includes docking, getting together with the Russians for two days, and everything else we've been doing ever since. It's just been super.

DONNELLY Jules Bergman, ABC.

BERGMAN For Tom Stafford. Tom, do you feel the mission was worth the 225 million dollar cost, and if so, if the NASA budget allowed, would another such joint mission with existing hardware be worth the cost?

ACDR Good morning, Jules. Well I think we actually - keeping under our budget by about 20 million dollars - well, I think it was about 230. The - was the mission worth the cost? Yes. I think definitely so. It did put together a new mechanism for both the countries and they both contributed equally to it as far as rendezvous for rescue and the main item it can show that in spite of great political differences that if people meet commitments that a lot of effort can be achieved. So I would say, yes, it was certainly worth the effort on both sides. And as far as Glynn Lunney, and a lot of us can see, it cost them as much or more than it did

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us as far as actual funds. As far as another mission, I think we'll have to review how all the impacts of this one and just look at that in the future, Jules. Over.

DONNELLY Shepard, NBC.

SHEPARD This question is for Slayton from the pilot of MR3. Now that you've had a chance actually to fly in a spacecraft after 16 years of waiting on the ground, was it really worth it? And tell me, how does it feel to fly without rudder pedals?

DMP Really didn't, Al, I had them there. That - answer your question, it feels great. The only thing that upsets me is having to miss all this fun for the last 16 years. You've known for that long how much fun it was and all I've done is sit back and listen to you guys talk about it - never believe it was quite as great as it really is. I don't think there's any way you can really express it, Al, as you well know. I think Vance covered it pretty well. Everything from the liftoff up to this point has just been super. And we know we have to come back tomorrow and I'm not sure I'm looking forward to it.

DONNELLY Nelson Benton, CBS.

BENTON This is for General Stafford. Tom, did the time taken for the ceremonial parts for docked activity, had that time --

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DONNELLY Benton, CBS.

BENTON Now this to General Stafford. Tom, did the time taken for the ceremonial parts of the docked activity, - had that time been spent otherwise, would more have been accomplished during the docked phase of the flight?

ACDR If the ceremonial time had been - other things - well actually, we concluded five joint experiments with the Soviet crew and tested out the docking mechanism and modes and also the other efforts. The ceremonial time I think amounted to just a very, very small segment of time. And, as you know, we got a lot of scientific data here in the solo flight. We got a lot while we were over there with them in a dual flight. So I think the time allocation was pretty good.

DONNELLY Nick Chriss, LA Times.

CHRISS Commander Stafford, you've had a very compressed timeline. I wonder if you could describe for us briefly, perhaps the crew's most difficult moments, thus far on this flight.

ACDR Well, as far as difficult moments, I don't know., We've had some trying moments, in the way we've taken the Apollo space-craft, and all this extra scientific apparatus onboard. And then try to make it into a little bit of a effort of a minor TV studio, so they could show the world what it was like in space when the Russian crew was over here, I think really, one of the - that I heard Vance and Deke comment on too, was to get this little bitty spacecraft stowed away with all this gear onboard so it looked half way decent. I mean, it was, as you say, a real bundle of snakes here. Deke?

DMP Yeah, I think probably the, there's no one thing that was any great difficulty, the one overall thing that is the perpetual problem, as Tom said, is the housekeeping problems. And that's again the one thing we've heard about from everybody that's ever flow, but again, you can't appreciate it until you're here. And everything that you drop floats off somewhere, and you got to chase it, then and it seems to find the most hidden cranny to deposit itself in. And, meals, which are a really mundane thing on Earth, with the same equipment up here, just take about three times as long to prepare, eat, and dispose of. Other than that, it's been super.

CMP Plus we need a traffic cop up here to direct who's going to go through which way, when. It seems like - we're always bumping into each other and trying to get into the same locker and it's really a pretty small volume up here. So that - that all works together to sometimes give minor frustration.

ACDR And we've had some long 16 hours days one after another. Maybe 16 plus quite a few hours, but everything is going off great and we feel in good shape but, I'm - working around in this little place with all this gear on has really been a bear.

DMP I think the flight planners did a super job to get this laid out as well as they did. There's really no way you can do any better, except just get up here and work it out in real time.

DONNELLY John Wilford, New York Times.

WILFORD For Vance Brand. For the last couple of days you've been busy with scientific experiments. Could you tell us, are you up-to-date on everything, are you behind on some of the experiments? Just what is the status of your experiments?

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CMP Well, we've been going right down the flight plan. And we have most of them out of the way. Still remaining, of course, is the doppler experiment, which - mainly the work today. It involves kicking off the docking module this afternoon, sometime around 2:30, Houston time I believe. And after that performing 2 engine burns to get spacing on the docking module and after that we will be measuring relative velocity between the docking module and our vehicle to, basically, get a better feel for the minor gravity fields around the Earth and find out where the big heavy land masses are - where the heavy things are that are equivalent to mascons on moon. So that's the main thing. After that it's medical tests, back on the ground.

DONNELLY Albert Bobikov.

BOBIKOV (For some sakes, I'll repeat it. All of us saw a good job together with the Soyuz cosmonauts in space. How did the preparation between the two countries, or between the specialists of --

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QUERY - good job together with the Soviet Cosmonauts in space. How did the cooperation between the two countries - between the specialists of the U.S. and the USSR help you in joint preparations in space?

ACDR (We have had more of it on the Earth. Yes, I think we had 2 nice years. We started working together - cosmonauts, engineers, and technicians; everything went so very well, though sometimes it was very difficult.)

DMP (Yes, I think that the cooperation in space is the best cooperation in the world.)

ACDR (Roger. We worked with the cosmonauts and we performed five joint experiments and now we have become good friends. I think that our cooperation is very good. We have had an excellent relationship and a good experience.)

CMP (Most important, we accomplished the docking. The docking was successful, and the rendezvous was successful. We have worked together 2 days. This was also successful.)

DONNELLY We'll get a transcript of that in English. Next, Mary Bubb, Reuters.

QUERY All of you three have done an absolutely super job. For Tom: How does this compare with your other missions? For Deke: Is it tougher or easier than you thought? And for Vance: Will you have any words of wisdom to the pilots of the Shuttle?

ACDR Good morning, Mary. What kind a hat are you wearing this morning? Well, compared to our other three missions, this one was completely different. In one sense, you know, working for the period of time and that's a lot of the fun of a mission is working on it before you fly with the Soviets. The rendezvous was somewhat similar, but the actual docking, the new mechanism, was different. The transfer back and forth was different and all that in the training. So, it was one heck of a lot of fun and there's a lot of trying efforts, but a lot of fun, and it was a different type of mission in a way, yes. Deke.

DMP Well, Mary. to answer your question about how tough or easy it was, from a physical point of view I haven't done anything my 91 year old aunt up in Wisconsin couldn't have done equally well. I think as far as the flight's concerned, it was probably easier than the training, mostly because we had a very nominal flight; the space-craft hardware's all performed superbly, we had absolutely no problems of consequence. And we never run a simulation, of course, without having a barrel of problems, so it's been a very easy flight all in all and a very enjoyable one.

CMP And I believe your question, Mary, to me was what would I - what words would I say to the Shuttle pilots coming up as a result of my experience on this flight. Well, I would say when you - I would direct my comment mainly in the area of spacecraft design, because right now they are designing the spacecraft and having it built. They're near the design phase, but I think that this vehicle has given us so much confidence just because it purrs right along and it seems to be a vehicle that we can - we can fly; actually, it's like riding a bicycle. We can fly this thing like you ride a bicycle; the man is part of the machine. And I hope that the pilots of Shuttle will do all they can to make the Shuttle the same sort of a vehicle that is one that uses the best of machinery and the best of man, puts them together to come up with a vehicle that they can have a lot of confidence in; just like we have

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CMP

confidence in this one.

DONNELLY

Peter Wright, Chicago Tribune.

QUERY Good morning, gentlemen. General Stafford: 15 years ago no man had been in space; now 12 Americans have walked on the moon, and a Russian and American spaceship have linked up in orbit. What - -

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QUERY Good morning, gentlemen. General Stafford. 15 years ago, no man had been in space. Now 12 Americans have walked on the moon, and a Russian and American spaceship have linked up in orbit. What will the next 15 years hold, sir?

ACDR Well, we're predicting - and I think everybody that's worked in the business, like Deke and Vance and I have, that space is going to become more and more a medium to work in that can benefit the people on the Earth. It won't be like an airline - probably ever for a long time to come. But we hope, with the future technology we're developing now, that a lot of great things can be accomplished. It'll cost us far less per pound to go into space - that we can bring back some great benefits, as far as Earth resources, manufacturing, and all those types of data. So after, say, a quiet period - for say, 4 to 5 years - then you're going to see space become a more and more - a somewhat routine type operation. Where we'll be at the end of 15 years would be very difficult to say, though.

PAO Lydia Dotto, Toronto Globe-

DOTTO Question for Commander Stafford. I would like you to comment on how well you thought you handled Russian during the mission, and whether you think this would be a practical way of doing things in the future, or whether you think there will eventually be a single official language used in space, as it is in aviation - when people from various countries around the world start flying.

ACDR Well, I guess - I think the whole crew handled the Russian language very well during the mission. I know, at least, all our commands were understood. And I think that the Soviets did a good job with English. And a couple of times, things would come from the control center that - to relay over. We'd tell them - what - that their control center wanted to talk to them, and instantly they'd take care of it. So, everything went off beautiful. And I think all our thoughts that we wanted to get over to them were conveyed. As far as a universal language, and this has been kicked around for a while. But I can't see it on the horizon. I don't know - Deke, or Vance?

DMP Well, there's been discussion over the years about Esperanto. In fact, it came up here recently this mission. But I think, if you're talking about a multi-national program, where you have a number of languages involved - probably, something like that would be desirable. I think, however, for a mission like we just - are in the process of completing, where there are only 2 countries and 2 languages, this is probably the way to go. Although, I have to admit - we surely spent a lot of manhours on language training. Probably at least 1/3 of our total training was on language. I can understand it.

DONNELLY Al Slagle. New York Daily News.

SLAGLE Stafford. What do you consider the single most important accomplishment for both countries of this mission?

ACDR Well, I guess the single most important accomplishment is the fact that it shows that the people of both countries - that we've

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worked together on a very difficult and tedious task, over a prolonged period of time; that we've successfully accomplished this task; that if the same dedication, the same commitment, to meet outlined goals and commitments, as carried forth - there's probably considerable other efforts that can be carried forward, that can benefit a lot of people. But both the commitment and the actual needs have to be there. But that, to me, is probably as significant as - even more significant than actually proving out the new docking mechanism.

DONNELLY Reg Turnill, BBC.

TURNILL Oh - for Deke Slayton. After 16 years experience of American doctors, Deke, did you find it reassuring to have a Royal Air Force doctor in Mission Control?

DMP Yes sir. You bet. We appreciate all - -

CMP He's a very fine doctor, too.

DMP We appreciate all the support we've gotten from your folk.

CMP He's only been with us a short time, but we sure think he's a great guy.

DONNELLY Craig Covault, AV Week.

COVAULT For Tom Stafford. From a piloting standpoint, the crew has done some very precise flying in the last few days - on the dockings and, especially, with Deke's UVA maneuvers. As pilots, how difficult has this mission been to fly with Apollo's maneuvering capability, compared to how difficult y'all thought it'd be, prior to liftoff?

ACDR Well, the - We have some great simulations, Craig. But we found that - actual flying it - it was actually, in some ways - The handling characteristics of the vehicle - was a little bit better than the simulator, because of the - some of the visual presentations. You do - you do have a lot more cues in orbit like, the night time - the way the stars the move, even. You know we had that in the simulator, but - the night -

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ACDR -- pression. You do have a lot more cues in orbit like the nighttime, the way the stars move even - even we had that in the simulator - but the night horizon and all that, so. I thought the actual flight task itself was a little easier flight than what we experienced in simulation. Needless to say, all three of us have a test pilot background, flight test experience and it's always great fun to fly. Deke?

DMP Yeah. I'd think Tom said it on the head. Our simulator visuals have never been the greatest; it's almost impossible to make them good - you know, perfect. And, so your visual cues are great, however comparatively. And, of course, the vehicle dynamics are always pure, which they are not always in the simulation. So I think generally it's easier, and straightforward and never any doubt at all about where you're going and what you're doing. We got into a couple of problems on the UVA with switch configurations - kind of had to get cranked up to go, but other than that everything was perfect in terms of the flying part of it. It was comparatively easy.

DONNELLY Laszlo Dosa, USIA.

DOSA Tom Stafford, has this mission improved the chances for a future international manned flight to Mars?

ACDR Well, that's a dificult question. I'll say definitely that it has, but the main thing that as far as any future flight to a distant planet like that, that's rather - the bit problem is this funding. We know how to do it, as far as going to Mars, and what we developed on the Apollo. Our country certainly has the techniques. As far as - I would think that probably - any flight like that would probably be of an international nature. The one thing we have - like onboard the Apollo spacecraft, just besides the joint mission of docking with the Soviets - we have two German biomedical experiments, and over the past period of time we've - we've always cooperated with other countries as far as helping them take their payloads into space and it's going to be bigger in the future.

DONNELLY Jacques Tisiou.

TISIOV This is a question for Vance since he has spent two years in Europe. Vance, how do you foresee a form of space cooperation between the United States, the Soviet Union and Western Europe?

CMP Jacques, you say if I thought of that particular thought? Or I did? I'm not sure I got the question completely.

DONNELLY Jacques, would you repeat the question please?
TISIOV Vance, have you foreseen some form of space cooperation that would involve the Soviet Union, the United States and Western Europe?

CMP Well I - I would guess that - that's certainly a possibility, but I'm not in a very good position to think that one out. It's - I think it's desirable that the whole world tend toward cooperation in space really and I guess we've had the first step here with the U. S. and the Soviet Union.

DONNELLY Harry Pease, Milwaukee Journal.

PEASE Cris Craft - this is for Deke - Cris Craft is quoted today as saying that you'll be offered an opportunity to direct the horizontal test of the Shuttle, and that you'll be considered a pilot for it. What's your reaction to that?

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DMP Good morning, Harry. How are you doing? We saw Milwaukee for you yesterday. Yeah - to answer to your question - I'm looking forward to working on the Shuttle or anything else that NASA management wants me to do. And, of course, that's the next program. I look forward to it as being a challange and I like to fly anything and everything and if I get a chance to fly that beauty, I'll certainly be happy.

DONNELLY The gentleman here.

NORM Roger Norm with the United Press International Audio Network. A question to Vance Brand. You've been in space more than a week now. Would you encourage the idea of having women astronauts on future long space trips? If so, why. If not, why.

CMP We were laughing because I think we've heard the question before. Well, I'll try to give a fresh viewpoint on it. I certainly think that in the years to come that we'll have women in space. It should - it should work great as long as everything is designed properly to have women in space. By that, I mean, this particular cabin with a mixed crew wouldn't work. It's too small. And it doesn't have the proper - -

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CMP - to have women in space, by that I mean this particular cabin with a mixed crew wouldn't work; it's too small and it doesn't have the proper facilities or even any kind of separation. But I think the first good chance for women in space would be in the Shuttle area - era, and probably in the experiments area, but we'll have to wait and see what happens.

DONNELLY Angus Macpherson.

MACPHERSON General Stafford. Short of Mars, which everyone seems to agree is a long way off, do you have any specific thoughts on specific undertakings which your two nations might get together on in space? And have you - did you discuss this at all with Colonel Leonov?

ACDR No. The main thing on this mission; we had to put all efforts and our thoughts and everything just to concentrate on - on getting this one done perfectly, which I think has been pretty much accomplished. The future thoughts, we are having negotiations with the Soviet Union. Dr. Fletcher has been over there; George Low talking with the Academy of Science. As far as with other countries, our - as you know the 9 European countries are building the ESRO Spacelab and that will fly in the Shuttle and in that one - there will be a whole series of European "astronauts" that'll be flying in the Shuttle working on the lab and that should take place in the early 1980's. Over.

DONELLY Harriet Shelare.

QUERY For Deke Slayton. Last month in a press conference here in Houston, you made some remarks that were critical of the Soviet government. Was there any reaction by the cosmonauts or discussion of these remarks during the flight?

DMP No. I don't know what else to say about that question. I didn't mean to give you a smart answer, but no, there's not been any discussion on the part of the cosmonauts. As a matter of fact, on the part of anybody else since I made those comments, other than the following day's press conference.

DONNELLY Gentleman in the first row. QUERY Deke, have you seen Salyut?

DMP Negative.

DONNELLY Gentleman back here in the blue sports jacket.

QUERY Can you tell me if any one of you; or all of you

could answer this, plan to do any work for increased funding for NASA?

DMP Certainly. We've been doing that for about 15 years and I would expect to continue doing that.

ACDR Well, we're not officially lobbyists, but I think basically all of us - believe that the increase in science and technology is going to help all the people, so how you get - how you apply that actually takes fundings.

CMP You better believe we'll - I'll try to do my best. I believe in it.

DONNELLY Everly Driscoll.

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QUERY For Deke Slayton. We realize you haven't had much time for a philosophical reflection, so off the top of your head what sight, sound or feeling has made the most vivid impression on you during the mission?

ACDR Good morning, Everly:

DMP Well, that's kind of difficult to answer. It's been a very complex situation. I guess to start with - with, the launch was super; I was expecting something a little different, I guess. It was just like a real fantastic super-powered airplane taking off into a big (garble). And of course, when we shot off into orbit, we didn't have much of a chance to look around, but that first view out the window was unbelievable. In fact, every time we look out the window it's kind of hard to believe; it's just - just fantastic scenery in every direction anytime we're in daylight. Flying around the Soyuz, of course, was also very interesting. And to kind of philosophize about any of this, guess we've been too busy to play the philosophical game yet. We may sit back and think when we get on the ground a little bit more.

DONNELLY Vic McElheny, New York Times.

McELHENY General Stafford. Is there anything unusual or tricky about getting rid of the docking module this afternoon; anything that's bothering you about it?

ACDR Well, no, we're not anticipating any problems. The crew - we have simulated in our simulator quite a few times and that's - we'll use an explosive device after we have rate going like this to spin it off. If that doesn't work - -

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ACDR - simulator quite a few times. And that's - we'll use an explosive device after we get a rate going like this to spin it off. If that doesn't work, we also have a backup mechanism using the probe, and drogue we can release it. But we're not anticipating any problems. It's a precise flying maneuver but I don't think there'll be any problems with it. The fact we were - I think all of us are going to hate to see the docking module go. It's been a real friend to us. It's - we use it as a bedroom, a transfer tunnels, as an air lock, an exercise room and a few other things.

CMP And a store room and an attic right now.

ACDR We'll hate to see it go.

DONNELLY Gentlemen here.

QUERY Nigel Wade, with the London Telegraph. For Deke Slayton. If you do get to fly the Shuttle would you be willing to take up a group of the press?

CMP Certainly, I'd be happy to. I think that'd be great to get all you folks up here. Cause there's no way we can sit up here to tell you about it or come back down there and tell you about it. And I think it'd be beautiful to bring you up here and show you.

DONNELLY Now this is going to be the last question, Hans Meyr.

QUERY Hans Meyr from RIAS West Berlin. Deke Slayton, you are right now a senior pilot in space. What can you say about the prospects, the future prospects of elderly people in space, recalling to your personal experience right now, in space as pilots and as passengers, would it be perhaps the same age limit as in aviation?

DMP Well, yes, in my opinion as far as flight crews in space are concerned, I see no reason to use any different criteria to speak of than we use for commerical airline people as long as people are technically qualified and can pass the physical, that should be the only criteria. I think as far as passengers are concerned, I see no reason why, essentially, anybody down there that wants to come to space, can't come to space. Especially in the Shuttle. The G loadings are very low in both launch and reentry. And, I wasn't kidding when I said earlier that I thought my 91 year old aunt in Wisconsin could come up and do this job physically. I believe, I really believe she can. I believe anybody else down there can.

DONNELLY Final question and a short one please, Bergman.

QUERY Tom, the Soyuz portion of the flight has come and gone. How do you feel now about the charges by a certain US Senator, that Soyuz was a death trap, that your flight had no scientific value, that the Russians couldn't control two spacecraft at once?

ACDR Remember, we discussed that, Jules, at the press conference before and having worked in detail with the - those people for 2 years, they certainly have a great capability. They're putting a lot of their resources into space exploration in the Soviet Union, and we'd been all thru Soyuz and also we'd ask them for a safety analysis and they'd shown us their systems and all that and we actually had no problems. It sounded like, possibly, no doubt that

ASTP (USA) MC634/2

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Apollo-Soyuz was great headlines, and maybe somebody wanted to grab hold of some action there, but the Soyuz looked solid as a rock just like we said it would be, like we inspected it at Baykonur, at the launch site. And it performed as they said it would. And as far as commander control, they had absolutely no problems. So, like you and I discussed earlier, Jules, everything was right there. There was no problem.

DONNELLY Tom, Deke, Vance, thank you very much. We're looking forward to seeing you at the post mission press conference. Thank you ladies and gentlemen.

CMP Real good, thank you. ACDR Thank all of you. (Russian). DMP ACDR Maybe next time we can have an upstairs in space. CC-H Hey, you guys did a great job, there. Professional as always. ACDR Thank you, Crip. And, now back to work roles. CC-H Right. ACDR Where were we? CC-H Maybe it's time for a little breakfast. ACDR And, we'll get this thing reconfigured here. CC-H Okay. We can also take that waste storage vent valve back to vent now and continue the venting. Incidentally, Mary was wearing an ASTP ball cap.

ACDR Oh good. I knew Mary had to be wearing some kind of a cap there so tell her hi, again.

 $\ensuremath{\mathsf{CMP}}$ Okay, Crip. And we performed the action of overboard drain to dump.

CC-H Okay.

DMP Crip, is there any reason that I can't continue with this furnace? I meant to ask you over Santiago, but it's all ended out. And, we'd just as soon get ahead - -

ASTP (USA) MC 635/1

Time: 08:04 CDT, 192:42 GET

Date: 7/23/75

DMP Crip, is there any reason I can't continue with this furnace? I meant to ask you over Santiago, but it's all ended out and we'd just as soon get a handle on that one if you can.

CC-H No. You - you're got to go ahead and continue that. Incidentally, Deke, I mentioned earlier to Vance with - with him doing that vent valve OPEN for me, we're deleting your DM/CM 02 purge. It was scheduled later due to the quantity of 02 that we got left in the DM.

DMP Okay.

CMP Okay, Crip. We're going to have to start moving some things around so I'll turn off the TV now and start packing up a little bit if that's okay with you.

CC-H That's fine. We're all through with it.

CC-H Appreciate all - -

ACDR (Garble) Deke, I'll get it right here.

CC-H Appreciate all the efforts you guys got - went to - to make that come off so well. It really looked good from down here.

ACDR A real -

CMP It was a lot of fun.

ACDR Thank you for coordinating the whole thing, Crip and all the guys down on the ground.

CC-H Vance, awhile ago, you said you were opening up the dump drain valve and - if that's the case then you're still dumping urine, if a - when you finish with that, we can have the wast stowage vent valve to OPEN so we can tell you the cabin purge.

ACDR And again, you said we are up - ending the DM/CM 02 purge.

CMD Okay. Correct that.

CC-H We are not doing the CM/DM 02 purge. That is

scrubbed.

ACDR Roger.

DMP Hey, Crip could you check our furnace samples, I'm not sure we went through all these. Seems to me like we missed one. We've three or (garble) four in there now. Got - -

CC-H Okay. Guys. We're on - we're on hot mike

apparently.

DMP Okay.

CC-H And for Vance's information we're getting through all the furnace samples we think except the symbolic sample which we don't have time to do.

CMP Okay, we'll pass that to Deke.

DMP I'm - I'm on the line here. I can hear you.

CC-H Okeydoke.

ASTP (USA) MC636/1 Time: 18:14 CDT, 192:54 GET 7/23/75

CC-H Apollo, Houston. We're about ready to lose you on the ATS and we have you again in, oh, a little over 7 minutes at Orroral. And it'd probably be easier to just go ahead and pick up the morning report over the next ATS pass; that's the next long duration. We'll try to get it somewhere in there.

ACDR

Okay.

CC-H While I'm going over the hill, let me tell you some great news. I was just informed that yesterday Alexey made General.

ASTP (USA) MC637/1 Time: 08:23 CDT, 193:03 GET

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PAO This is Apollo Control. About a minute away from reacquistion through Orroral Valley, Australia tracking station. Had loss of signal through ATS-6 satellite, 2 or 3 minutes ago. And we'll stand by for the Orroral pass.

CC-H Apollo, Houston. With you through Orroral for 3 minutes.

ACDR You cut out the - just the last - went over the hill before us. Would you repeat that last transmission ?

CC-H Okay. I was just telling you, I don't - don't think that news has been passed up yet - that - just informed that, yesterday, Alexey made general.

ACDR Oh, real good. You can tell him congratulations.

DMP Yeah, congratulate him for us.

CC-H Rog.

CMP Really glad to hear it.

CMP Guess everybody thought that might be a possibility.

CC-H

Been looking ahead, here, at the timeline today. And you guys may be trying to get ahead on a few things. So, want to warn you about a couple of items. I was going to ask, Tom, for you to modify slightly how you were going to take the picture of the fish. In addition to what you normally take, we were going to ask that the portable light be placed off about 45 degrees from - on either side, to get the pictures like that - to see if the fish try to reorient to follow the light a little bit. But we can talk about that a little bit further when you do it. Also, we're going to make a stowage modification to bring back a couple of the LiOH canisters that were installed at the time that you guys - with that funny odor up there - just before initial docking. And I can get that to you a little bit later. Just wanted to tell you, in case you were trying to get ahead of me, there.

ACDR Okay.

DMP Just like to pass on to the Granola experts, down there, that they taste as good up here as they do down there.

Couldn't copy that, Deke. What tastes as good? CC-H

DMP Granolies.

Granolies! Very good. CC-H

CC-H We're about a minute from LOS. Next station contact will be through Quito, in 28 minutes. See you there.

ACDR Okay.

CC-H Have a long rest period, for both of us to get some breakfast.

This is Apollo Control. Loss of signal at Quito as you were - at Orroral Valley tracking station. Next station, in 26 1/2 minutes, will be Quito, Ecuador, at which time we will return. At 197 - 193:07, this is Apollo Control.

ASTP (USA) MC638/1

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time. Acquisition within about 35 seconds at tracking station Quito, Ecuador. And we're standingby for resumption of communications through the station with the crew of Apollo. And - fairly full day of experiment activities. Stowage, getting the docking module ready for jettison later today. For the docking module jettison the Apollo crew will don their pressure garments or space suits. And after successful jettison, they will remove the garment. The jettison will be done in the same manner that the lunar modules were jettisoned in lunar orbit. That is the pyrotechnic charge around the docking ring at the forward end of the command module, will be ignited and will literally blow the metal apart to sever the connection between the spacecraft and the docking module. An attempt will be made to spin up the docking module, about 5 degress per second rotation rate for the doppler experiment.

CC-H Hello, Houston. We're AOS at Quito for a minute and a half.

CMP Okay, Crip got you.

CC-H I'm informed that I should call it "KE-TO" and not "KWE-TO," as I've been doing.

CMP Hey, just wanted to make 1 comment before I forgot. You might tell the food people that these food trays really are neat needs. They're really are just the thing we need up here to eat our meals up with. Designed very well.

CC-H Well, that's a good comment. I'm sure they'd be glad to hear it. What- you all sort of put them up on the main display console?

CMP That's right, uh-huh.

CC-H Great. Incidentally, we had a waste water dump scheduled for Tom upcoming here, and we want to delete that since all we are running the secondary evap and using your water.

CMP Yeah, looks like we were down somewhere around 16 L in our fluctuating gage.

CC-H Okay.

CC-H Okay, we're going over the hill here, and I'll pick you on the ATS shortly.

PAO This is Apollo Control. A brief gap here between Quito, Ecuador and ATS-6 satellite acquisition of Apollo. Back to the docking module jettison after the pyrotechnic has been fired to separate the docking module from Apollo, a series of 2 maneuvers will be made. The first of which will be a posigrade maneuver to place Apollo some 300 kilometers in back of the docking module, that is by going posigrade raises the altituted of the spacecraft into a higher and thereby slower orbit of the docking module gets out ahead of Apollo by 300 kilometers, and then that separation velocity will be cancelled out by a second maneuver, both of which are around 6.2, 6.3 feet per second. So that the range and altitude and orbital period remain constant.

CC-H We're AOS through the ATS; got you for 51 minutes.

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CC-H Apollo, Houston. We're AOS through ATS. Got you for about 50 minutes.

DMP Okay, Crip. Go you.

CC-H Okay, Deke.

DMP Do you have some special instructions for us on the fish? We missed it there I guess.

CC-H No, all I wanted to do was to warn you that I did have some instructions. Basically, when Tom or whoever takes the picture of them day, we would like to, in addition to the normal pictures we get, we would like to remove the portable light from the camera and hold if off at about a 45 degree angle at either side and get some photos that way, see if we can get the fish reorienting to the light.

ACDROkay.

CC-H Okay.

ACDR You said you want them on either side, huh?

CC-H Yes sir, if we could, probably gonna require 2 guys to do that, of course.

ACDR Yeah, Deke and I will.

ACDR I don't know whether I ever told those guys down there or not, but, Crip, but all of those fish orientated to the bottom of the package, what would be the colored side, I guess is the best way to explain it; there isn't any bottom.

CC-H Very good. I guess -

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ACDR -- (garble) to the bottom of the package - what would be the colored side, I guess would be the best way to explain it. There isn't any bottom.

CC-H Very good. I guess then they would be interested to know if moving the light over from an angle like that makes any difference to them.

ACDR I've been doing a lot of that. It doesn't seem to, but we'll get some pictures of it, anyway.

CC-H Okay. That'd be very interesting because I think that, you know, that is one of the centrally - mechanisms of the fish to - to reorient in that manner. Not being a - being a big fish expert of course.

ACDR I hate to admit it, but neither am I.

CC-H Now, now - I know better than that. I've seen you bring too many in.

CC-H Apollo, Houston. When somebody gets a chance, if we could have an ACCEPT, we'll go ahead and update your tape deck there.

ACDR Okay. You've got it.

CC-H Coming at you.

CC-H Deke, I wonder if this might be a good place to do this modification I was talking to you about on the LiOH cans, so you can get it noteed down in your book and work it. We'll need the DM checklist to do that.

DMP Okay. You need a DM checklist. Stand by. I'll tell you if I could - I'll write it down in the flight plan here and then transfer it off that.

CC-H That's fine. We can hold up to your working. As far as I'm concerned, it's no big deal.

DMP Okay.

CC-H Okay. The update's complete and you guys can have the DSKY back - go back to BLOCK.

ACDR Okay.

CC-H Apollo, Houston. We see that we haven't powered down the experiments - SIM bay experiments yet. Like to go ahead and do this now if we could.

ACDR Okay. Stand by, Crip. We're kind of meddling around here between the DM in here with everybody getting things sorted out.

CC-H Okay. We see them coming down. Appreciate it.

ACDR And do you want that X-ray purged at all?

CC-H Negative. We do not.

CC-H What we're bringing them down for now is this fuel cell purge and you might note that down there: a little bit later, about 194:25 we ask you to bring them back up again. One with a mod we're going to ask there - when we bring them back up, we're going to take the EUV on detector 1 vis (?) 2. And I'll remind you of it there.

ACDR Okay.

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ACDR Okay, Crip. I'm ready to copy on the docking module checklist.

CC-H Okay. If you'll flip over to page 13-1.

ACDR Okay. We're there.

CC-H Okay. Just two items. Anywhere under that first part there when you first start, let me tell you what we're going to do and you can note it how ever you want to. We've currently got LiOH can number 15 and 16 in B6 and we have cans number 5 and 6 in D^{l_1} . What we want to do is exchange those so that we end up coming back with 5 and 6 in B6, and we throw away 15 and 16 in D^{l_1} with the docking module. Is that clear?

ACDR Yeah, I think so. 15 and 16 are now in B6; you want those transferred to D4 and replace them with numbers 5 and number 6 currently in D4.

CC-H That's affirm.

ACDR Okay.

CC-H Okay. And the other item is over in the right-hand column there, I guess under the load jettison stowage bag and stuff that Vance is going to do, in the TSB in the right-hand equipment bay, it tells him to put the cabin vent QD; we're going to leave that on due to this extra venting that we're having to do and we're just - unless it gets in you guys' road, we're just going to leave it on for entry. No need to remove it, so we're not planning on throwing that away.

ACDR Okay.

CC-H Okay. That's really - really all I needed to modify. To understand - to help us understand what we're doing a little bit better on the purging, we would like to under - to know whether you're currently running with 2 suit hoses, or 1 suit hose into the DM?

ACDR Just one.

CC-H Just one. Okay, okay fine.

ACDR Hey - -

CC-H Apollo, Houston. Whenever somebody can get around to it, we're also standing by for the morning report down here.

DMP Okay. Stand by. We haven't quite got around to working that up yet.

CC-H Okay

CC-H Talking about morning report and food and everything, Rita's down here in - at the MOCR today; I'm sure she appreciates all those good words about the food table and so forth.

ACDR Yeah. All in all, it's been mighty fine; and the few problems we've had has been - has been zero-g problem which is nothing new and we don't have any magic solution to, either.

CC-H Rog.

ACDR And you can tell Rita that I bet we've all three gained weight on this one.

CC-H Okay. We'll blame it on her.

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ACDR I did get an orange too sour this morning; we had a bag (garble) but that's the first time I've had that happen.

CC-H Well, did that match your strawberry you'd had earlier

in the mission?

ACDR Yeah, that makes a beautiful view over the window

here.

CC-H Rog. Helps out the VIS OBS I put it.

ACDR Right. Like looking at the world through rose colored

glasses.

ACDR Okay, Crip. We've got Li canisters 5 and 6 in here

in B6.

CC-H Okay. Real fine. Appreciate that, Tom. They're just interested in analyzing them to see if we can try to figure out what that odor was that you guys smelled a little bit earlier.

ACDR That's a good idea.

CC-H You mentioned the color or the hues on the window there; we're going to ask you to try a little bit more of the red tide when we come over it today. I was going to give you a update on that a little bit later; think we might be able to get some different photos of that area again.

ACDR Okay. They all look red today.

CC-H Understand.

ACDR Crip, looking ahead in the flight plan, have we got to close the overboard drain, the urine - these urine dumps and water dumps when we turn on the stuff again?

CC-H That's affirm. The intent there is to turn the experiments back on when you finish the dump.

CC-H If you started that urine dump about as - on time there - assuming it's going on and it should be cleaned out pretty good by the time that we've got called out to start powering the experiments up.